

Blanding's Turtle

Emydoidea blandingii

Best Management Practices

Missouri Department of
Conservation

Common name ▪ Blanding's Turtle
Scientific name ▪ *Emydoidea blandingii*
State status ▪ Endangered
Federal status ▪ None

Ecology

Blanding's turtles occur in many states in the Midwest and into southern Ontario. There are also isolated populations in Massachusetts and New Hampshire. In Missouri, they inhabit wetland areas in the northeastern and northwestern corner of the state. Blanding's turtles are semi-aquatic in nature and primarily live in marshes, water holes, sloughs, streams and ponds with relatively dense vegetation, but they also may be found in grasslands. They are active from early April to late October and overwinter in mud at the bottom of marshes or ponds. Breeding occurs between early April and mid-July and again from mid-August through mid-September. Females lay 6-15 eggs in a sandy, dry soil that is well-exposed to sunlight and young hatch in September. Blanding's turtles eat crayfish, aquatic larvae of insects, some terrestrial insects, and frogs.

Reasons for Decline

It is likely that Blanding's turtles were never more widespread in Missouri than they are

currently. However, destruction of wetlands and swamps for agriculture and urbanization projects has eliminated habitat for these turtles and limited their range here. In addition, degradation of remaining habitat because of non-point source pollution continues to threaten the status of the Blanding's turtle in Missouri. Extensive egg predation is also a major factor in the populations decline. This species is also sensitive to habitat alteration such as cultivation to the water's edge and use of herbicides.



Recommendations

Protection and restoration of wetlands is critical for the survival of many species, including the Blanding's turtle. Due to the year-round requirement these animals have on wetlands, impacts on these areas within the range of this species should be minimized. Human intervention and management is necessary for this species survival because of their high rate of reproductive failure and increased mortality rates. Refer to Management Recommendations for Construction Projects Affecting Missouri Wetlands and Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers.

Beneficial Practices

- Avoid removing or destroying unique habitat features, such as downed trees, that provide habitat for the Blanding's turtle.
- Erosion and sediment controls should be implemented, maintained, and monitored for the duration of the project.
- Disposal of wastes and garbage should be done in designated areas far from wetlands.
- Avoid altering water levels in wetlands where Blanding's turtles are present.
- Turtle tunnels under roadways may help this species carry out reproductive activities.
- Maintain water holes, wetlands, bogs, and lakes with basking logs.

Adverse Practices

- Draining or destroying known wetland habitat.
- Application of herbicides that alter aquatic vegetation and insecticides that kill prey.
- Dredging, filling, and navigational improvements that alter water levels.
- Burning during the active season between early April and late October

Information Contacts

For further information regarding regulations for development in wetlands, rivers and streams, contact:

Missouri Department of Conservation
Policy Coordination Section
P.O. Box 180
2901 W. Truman Blvd
Jefferson City, MO 65102-0180
Telephone: 573/751-4115

Missouri Department of Natural Resources
Division of Environmental Quality
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 573/526-3315

U.S. Army Corps of Engineers
Regulatory Branch
700 Federal Building
Kansas City, MO 64106-2896
Telephone: 816/983-3990

U.S. Environmental Protection Agency
Water, Wetlands, and Pesticides Division
901 North 5th Street
Kansas City, KS 66101
Telephone: 973/551-7307

U.S. Fish and Wildlife Service
Ecological Services Field Office
101 Park DeVillie Dr., Suite A
Columbia, MO 65203
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Legal

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from other state agencies, contractors, and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat.

Compliance with Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Other federal, state or local laws may affect construction practices.

"State Endangered Status" is determined by the Missouri Conservation Commission under constitutional authority, and specific requirements for impacts to such species are expressed in the Missouri Wildlife Code, rule 3CSR10-4.111.